# WSDOT Materials Laboratory Library Selected New Acquisitions - December 2010

## HARDCOPY BOOKS, REPORTS, MEDIA

#### **AASHTO** Publications

Guide for the Local Calibration of the Mechanistic-Empirical Pavement Design Guide. American Association of State and Highway Transportation Officials, 2010. LCG-1. AASHTO LCG-1 2010

Available online to WSDOT staff through IHS Standards Expert (link through either the WSDOT Libraries or Materials Laboratory Intranet site). The document number in IHS is AASHTO LCG-1.

### Interdisciplinary Interest

**2010** Annual Book of ASTM Standards, Section 00 Index, Volume 00.01 Subject Index; Alphanumeric List. ASTM International, 2010.

R 620.112 Am35b 2010 sec.00 v00.01

### Geotechnical Engineering, Engineering Geology

Geology and Properties of Earth Materials 2010. Transportation Research Board, 2010. Transportation Research Record no. 2170.

625 HRR 2010 no2170

Available online to WSDOT staff. Go to <a href="http://trb.metapress.com/home/main.mpx">http://trb.metapress.com/home/main.mpx</a>. Click on "Browse by Issue" and select Volume 2170.

**Mohr Circles, Stress Paths and Geotechnics** *by* R.H.G. Parry. Spon Press, 2004. 624.1513 PARRY 2004

#### **Pavements**

**Models for Predicting Reflection Cracking of Hot-Mix Asphalt Overlays**. Transportation Research Board, 2010. NCHRP Report no. 669.

625.7 N2131r 2010 no669

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\_rpt\_669.pdf

**Pavement Management 2010, Volume 2**. Transportation Research Board, 2010. Transportation Research Record no. 2154.

625 HRR 2010 no2154

Available online to WSDOT staff. Go to <a href="http://trb.metapress.com/home/main.mpx">http://trb.metapress.com/home/main.mpx</a>. Click on "Browse by Issue" and select Volume 2154.

## **ELECTRONIC BOOKS, REPORTS, MANUALS & NEWSLETTERS**

## Geotechnical Engineering, Engineering Geology

**Basics of Foundation Design** [Electronic edition, November 2009] *by* Bengt H. Fellenius. http://www.fellenius.net/papers/286%20The%20Red%20Book Basics%20of%20Foundation%20Design.pdf

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**Bridge Engineering 2010, Volume 3**. Transportation Research Board, 2010. Transportation Research Record no. 2202.

Available online to WSDOT staff. Go to <a href="http://trb.metapress.com/home/main.mpx">http://trb.metapress.com/home/main.mpx</a>. Click on "Browse by Issue" and select Volume 2202.

**Dynamic Passive Pressure on Abutments and Pile Caps**. Utah Dept. of Transportation, 2010. <a href="http://www.udot.utah.gov/main/uconowner.gf?n=1789909935831355">http://www.udot.utah.gov/main/uconowner.gf?n=1789909935831355</a>

**Geoengineer.org Newsletter**, no. 72, December 2010. http://www.geoengineer.org/geonews72.htm

**Lateral Pile Cap Load Tests with Gravel Backfill of Limited Width**. Utah Dept. of Transportation, 2010. http://www.udot.utah.gov/main/uconowner.gf?n=17261514727247715

**Laterally Loaded Pile Cap Connections**. Utah Dept. of Transportation, 2010. http://www.udot.utah.gov/main/uconowner.gf?n=1808620883713576

Numerical Analysis of Dense Narrow Backfills for Increasing Lateral Passive Resistance. Utah Dept. of Transportation, 2010.

http://www.udot.utah.gov/main/uconowner.gf?n=1789317676767302

Optimization of Stabilization of Highway Embankment Slopes Using Driven Piles – Phase I. Colorado Dept. of Transportation, 2010.

http://www.coloradodot.info/programs/research/pdfs/2010/drivenpiles.pdf/view

#### **Pavements**

**Allowable Axle Loads on Pavements**. University of Minnesota, Center for Transportation Studies, 2010. <a href="http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1468">http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1468</a>

**Cold-In-Place Recycling in New York State**. New York State Dept. of Transportation, 2010. <a href="https://www.nysdot.gov/divisions/engineering/technical-services/trans-r-and-d-repository/C-06-21%20Final%20Report%20-%20July%202010.pdf">https://www.nysdot.gov/divisions/engineering/technical-services/trans-r-and-d-repository/C-06-21%20Final%20Report%20-%20July%202010.pdf</a>

Evaluation of the Base/Subgrade Soil under Repeated Loading: Phase I – Laboratory Testing and Numerical Modeling of Geogrid Reinforced Bases in Flexible Pavement. Louisiana Transportation Research Center, 2009.

http://www.ltrc.lsu.edu/pdf/2010/fr\_450.pdf

Field Evaluation of Asphalt Mixture Skid Resistance and Its Relationship to Aggregate Characteristics. Texas Dept. of Transportation, 2010.

http://tti.tamu.edu/documents/0-5627-2.pdf

Interim Network Level Functional Road Deterioration Models. Austroads, 2010. <a href="https://www.onlinepublications.austroads.com.au/items/AP-T158-10">https://www.onlinepublications.austroads.com.au/items/AP-T158-10</a> [Register to download PDF]

**Pavement Management 2010, Volume 1**. Transportation Research Board, 2010. Transportation Research Record no. 2153.

Available online to WSDOT staff. Go to <a href="http://trb.metapress.com/home/main.mpx">http://trb.metapress.com/home/main.mpx</a>. Click on "Browse by Issue" and select Volume 2153.

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Reference Measurements of Pavement Management System Roadway Elevations. Louisiana Transportation Research Center, 2009.

http://www.ltrc.lsu.edu/pdf/2010/fr 459.pdf

Review of Specifications for the Collection of Digital Road Imaging. Austroads, 2010. https://www.onlinepublications.austroads.com.au/items/AP-T169-10 [Register to download PDF]

"Updates from the States: Washington" in CP Road Map E-News, November 2010. http://www.cproadmap.org/publications/e-news.cfm#DOT

### Materials, Testing, Inspection

**Evaluation of Thin Overlays for Bridge Decks**. Oregon Dept. of Transportation, 2010. http://www.oregon.gov/ODOT/TD/TP\_RES/docs/Reports/2010/ThinOverlayForBridges.pdf

Guide for the Use of Shrinkage-Compensating Concrete. American Concrete Institute, 2010. 223R-10. *Available online to WSDOT staff.* Go to <a href="http://www.concrete.org/Pubs/MCP/MCP\_Search.asp">http://www.concrete.org/Pubs/MCP/MCP\_Search.asp</a> Scroll down to 223R-10, and log in with user ID and password as instructed.

Precision Estimates of AASHTO T 180: Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop. Transportation Research Board, 2010. NCHRP Web-Only Document no. 168.

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\_w168.pdf

**Specifications for Structural Concrete**. American Concrete Institute, 2010. 301-10. *Available online to WSDOT staff*. Go to <a href="http://www.concrete.org/Pubs/MCP/MCP\_Search.asp">http://www.concrete.org/Pubs/MCP/MCP\_Search.asp</a> Scroll down to 301-10, and log in with user ID and password as instructed.

Study on the Use of Self-Consolidating Concrete on the Interstate 25 Bridge Replacement in Trinidad, CO. Colorado Dept. of Transportation, 2010.

http://www.coloradodot.info/programs/research/pdfs/2010/scc/view

**Test Procedure for Determining Organic Matter Content in Soils -- UV-VIS Method**. Texas Dept. of Transportation, 2010.

http://tti.tamu.edu/documents/5-5540-01-P4.pdf